

C 1 6 1 4 E R

1 6 mm 1 : 1 . 4

(H R S P E C .)

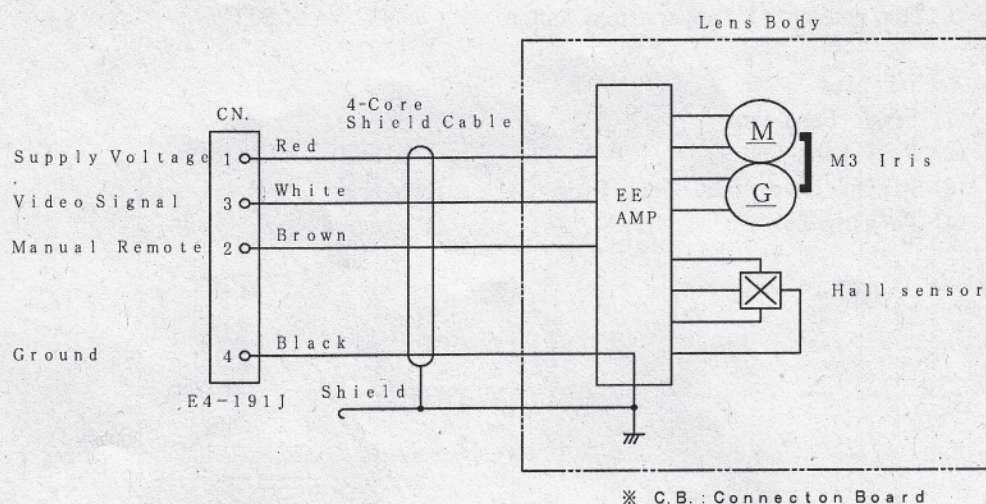


1. Model C1614ER
2. Application For 2/3 Format CCTV Camera
3. Specification
- 3-1. Physical (As per the attached drawing)
- (1) Dimensions 46.5 (W) × 50.5 (H) × 46.7 (D) mm
  - (2) Weight 110g
  - (3) Mount C-Mount (1-32UN-2A) Position Adjustable
  - (4) Filter Screw Size  $\phi$  43mm, P=0.75mm
- 3-2. Optical
- (1) Focal Length 16 mm  $\pm$  5%
  - (2) Max. Aperture Ratio 1: 1.4
  - (3) Iris Range F / 1.4 to F / 360
  - (4) Illumination Ratio 1:66,000
  - (5) Angle of View
    - Diagonal 38.25°
    - Horizontal 30.73°
    - Vertical 23.19°
  - (6) Picture format 8.8mm × 6.6mm
  - (7) Minimum Object Distance Inf. to 0.5m
  - (8) Back Focal Length 14.50 mm
  - (9) Flange Back Length 17.526 mm  $\pm$  0.05mm
- 3-3. Mechanical
- (1) Focusing Mechanism
    - Straight Helicoid
    - Rotation Angle 58°
    - Rotation Torque 0.98 N·cm to 3.92 N·cm
- 3-4. Electrical
- (1) Iris
- ① Auto Iris
    - 1. Supply Voltage & Current DC 8 V to 15 V 45 mA or less
    - 2. Input Signal V or VS
    - 3. Iris Accuracy  $\pm$  20 % at V signal level
    - 4. Sensitivity Adjustment 0.5 V(p-p) to 1.0 V(p-p) at V signal level continuously adjustable
    - 5. Input Impedance High Impedance
    - 6. Response Speed 1.5 sec. (approx.)
    - 7. Metering Average to Peak continuously adjustable (adjusted at Average when delivered)
    - 8. Close Down Iris closes down when the power is cut off and protects Image Sensor from strong light.
  - ② Manual
    - 1. Control Voltage & Current DC 1.5V to 5.5V 0.3mA or less
    - 2. Close Down Iris closes down when the power is cut off and protects Image Sensor from strong light.
- (2) Connector E4-191J made by Chuomusen

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							SPEC. SEET
No.	Revisions	Date	By				
PENTAX Precision Co.,Ltd.				Data Drawn	Drawing Number		
				APR. 23, ' 03	31631-X001-00HR-B14		

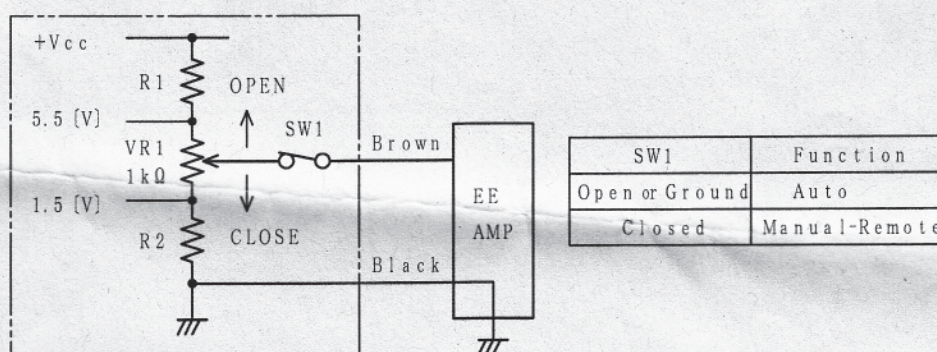


### (3) Connection for Auto Iris



### (4) "Manual-Remote" Control

Remote" Control can be done by the connection shown in the figure



\* Vcc represents supply voltage from controller.

### 3-5. Vibration & Shock Test Standard

#### (1) Vibration Conditions

Wave	Sine Wave
Acceleration	1.96 m/s <sup>2</sup> to 59.78 m/s <sup>2</sup>
Cycle Range	10 Hz to 55 Hz
Cycle Period	3 Minutes
Duration of Vibration	120 Minutes Respectively in Three Dimensional Directions

#### (2) Shock Conditions

Tester	Shock Testing Machine by Dropping
Impact Force	588 m/s <sup>2</sup>
Duration of Shock	3.5 ms
Directions & Number of Times	1 Time Respectively in Three Dimensional Directions

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3-6. Environmental Temperature Range

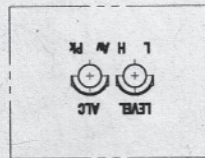
-20°C to +50°C

4. Accessories

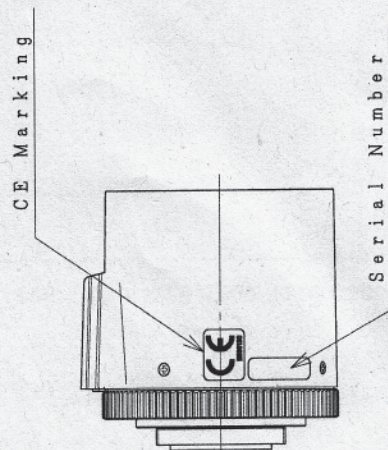
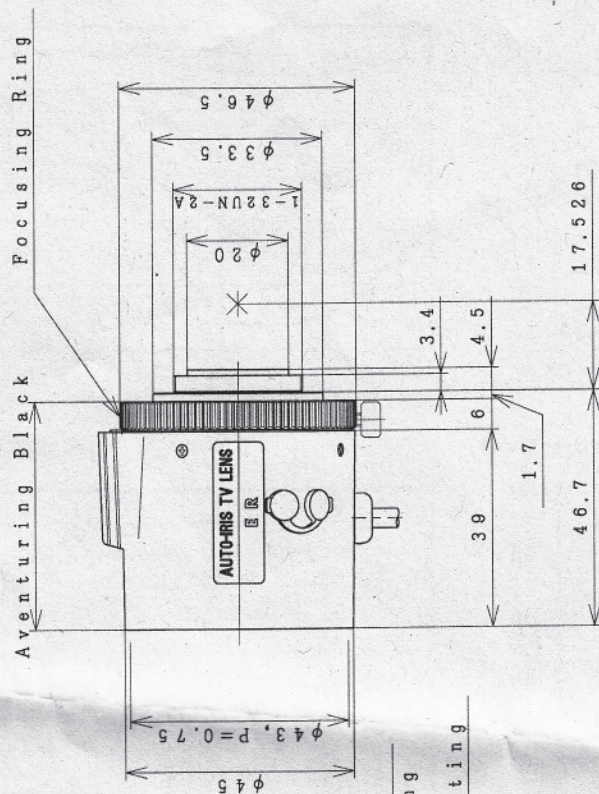
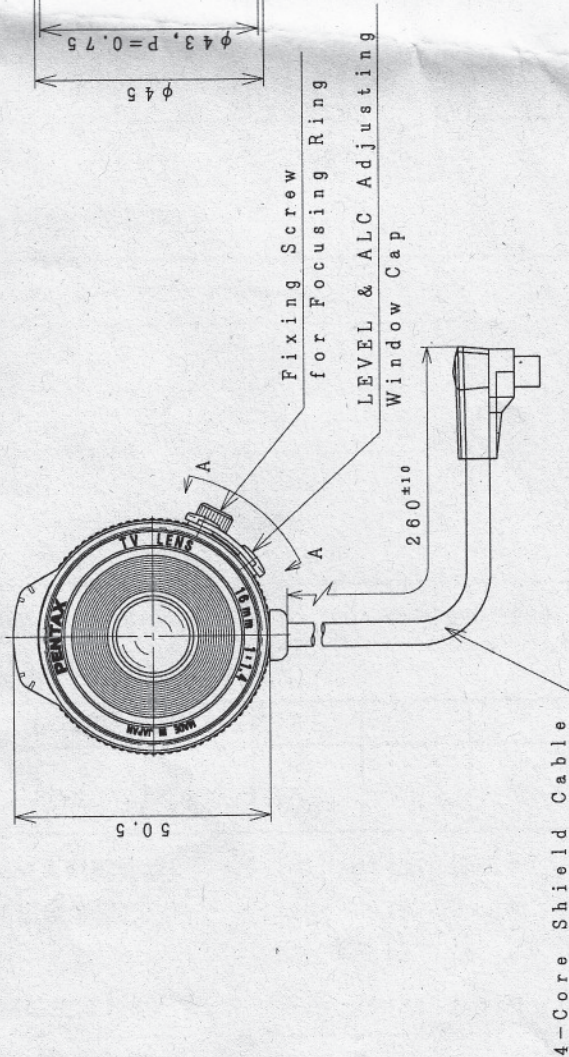
- |                                 |         |
|---------------------------------|---------|
| (1) Front Lens Cap              | 1 piece |
| (2) Rear Lens Cap               | 1 piece |
| (3) Fixing Lever for Focus Ring | 1 piece |
| (4) Packing Box                 | 1 piece |

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A-A (When Cap is off)



UNIT: mm

3	尺数	恒数	名称	C1614ER
2	N.T.S.		16mm F/1.4	
1			External View	
承認	設計	製図	検図	図面番号
訂正	記事	年月日	担当	31631-X001-00HR-B44
		完図	校図	
		APR. 28. '03	年月日	
PENTAX Precision Co., Ltd.				



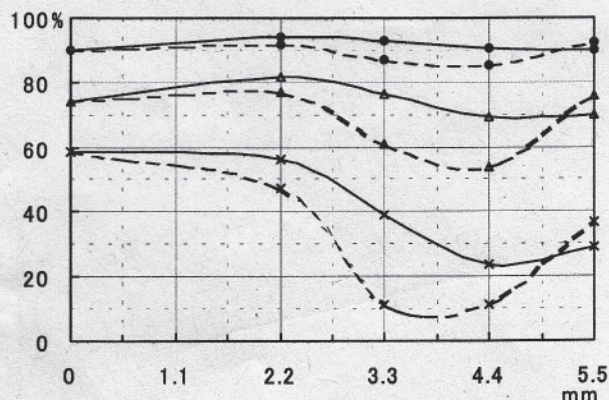
## TECHNICAL DATA

C1614ER

16mm 1:1.4

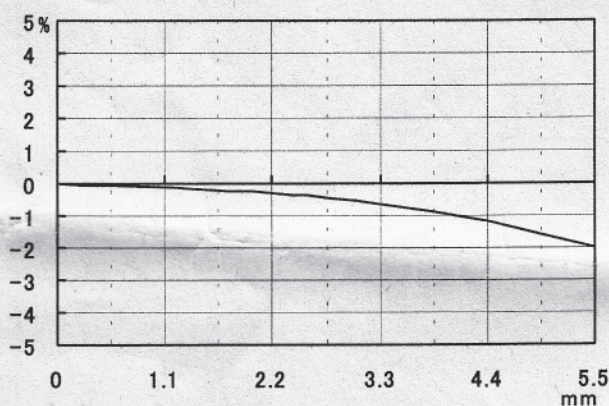
calculated

## ●Optical Transfer Function (OTF)

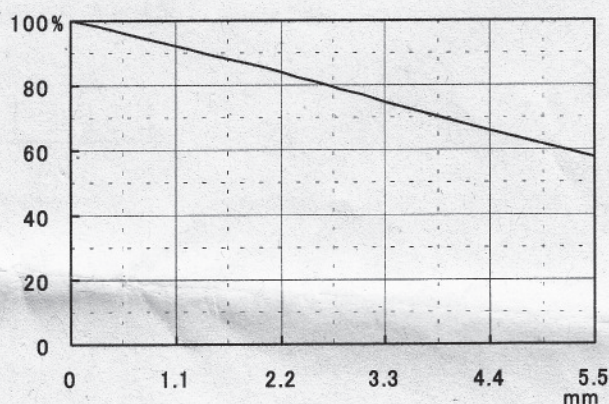


4D-0695T0170

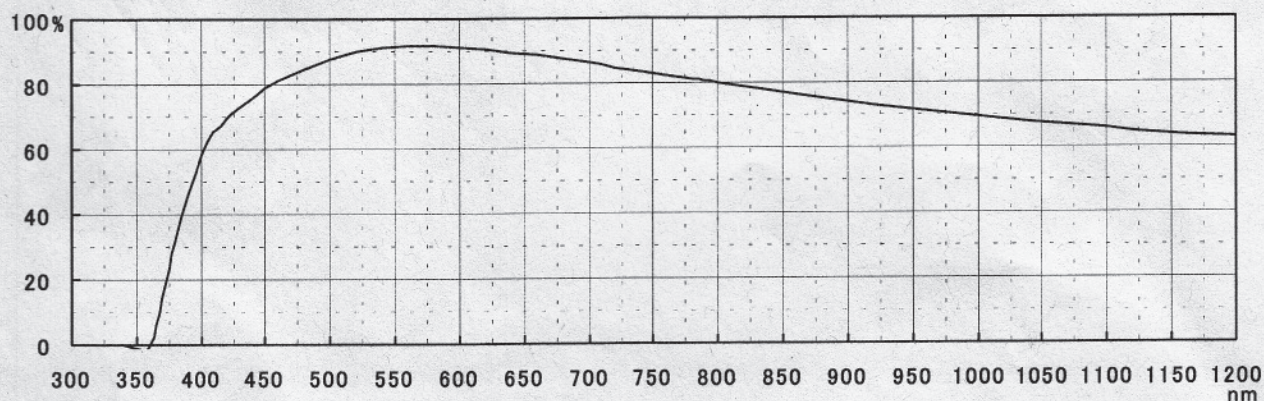
## ●Distortion (歪曲収差)



## ●Vignetting (周辺光量)



## ●Spectral Transmittance (分光透過率)



## ●Resolving Power (解像力)

y	0	3.3	4.4	5.5		
Rr(S)		50	32	40		
Rt(M)	80	25	25	40		

## ●Entrance Pupil Position (入射瞳位置)

-31.10 [mm] \*

## ●Exit Pupil Position (射出瞳位置)

-49.19 [mm] \*

## ●1st Principal Point (第一主点)

-20.24 [mm] \*

## ●2nd Principal Point (第二主点)

-16.18 [mm] \* (\*: From Image Plane)

ペンタックスプレジジョン株式会社  
PENTAX PRECISION CO., LTD.  
<http://www.pentax.co.jp/ppc/>

The above figures are calculated on design data. / Optical Design Department

これらの値は設計データより算出された値です。 / 光学設計部

Drawing Number

31631

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